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Micro-Structure and Mechanical Properties of Alloys

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Message from the Guest Editor

Dear Colleague,

The main aims of this Special Issue are to collect the original state-of-the-art research works, technical research articles, and or comprehensive review articles in the field of structural metals/alloys includes metal matrix composites, nanostructured materials, high-entropy alloys, bulk-metallic glasses, and oxide dispersion strengthened alloys. The works demonstrating alloys with tensile, compression, shear, torsion, creep, and fatigue behavior from the elastic to plastic stage are focused through this Special Issue. This Special Issue encourages the researchers for describing the mechanical behavior by correlating several characterization techniques, namely, X-ray diffraction, scanning electron microscope, transmission electron microscope, and atomic probe tomography. The advanced materials manufactured from powder metallurgy, casting, laser processing, thin film technology, additive printing technology, etc., are the main scope of this Special Issue. Further, material modeling, finite element analysis, and any modelling techniques (using artificial intelligent) dealing with the mechanical behavior of alloys are also covered in this Special Issue.



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Special Issue



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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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